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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,485	10/01/2003	Robert Edward Markowitz	1014-041	7518
26652 7590 02/27/2007 AT&T CORP. ROOM 2A207 ONE AT&T WAY BEDMINSTER, NJ 07921			EXAMINER LAZARO, DAVID R	
			ART UNIT 2155	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/676,485	<b>Applicant(s)</b> MARKOWITZ ET AL.	
	<b>Examiner</b> David Lazaro	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-22 are pending in this office action.
2. The Preliminary Amendment, filed 10/01/2003, amended claims 1 and 12.

### ***Priority***

3. This application is a continuation of application 09/466,631 (12/17/1999), which is a continuation in part of application 09/294,525 (04/20/1999).

### ***Drawings***

4. The examiner accepts the drawings filed 10/01/2003.

### ***Specification***

5. The disclosure is objected to because of the following informalities: As both applications 09/466,631 and 09/294,525 have issued as patents, the specification, on page 1, should additionally indicate the corresponding patent numbers.

Appropriate correction is required.

### ***Claim Objections***

6. Claim 3 is objected to because of the following informalities: Claim 3 includes the term "fag" which examiner believes was intended to be "flag". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 4 recites the limitation "identifying the missing data packets" in line 2.

There is insufficient antecedent basis for this limitation in the claim. The examiner suggests changing the limitation to "identifying missing data packets".

***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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11. Claims 1-3, 5, 7, 12-14, 16 and 18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S.

Patent No. 6,651,103 in view of U.S. Patent 6,377,103 by Guo.

12. Claims 1-4 of US 6,651,103 essentially claim the same features of claims 1-3, 5, 7, 12-14, 16 and 18 of the instant application. The primary difference is the inclusion of the limitation "not directly connected to the media server" in independent claims 1 and 12 of the instant application.

However, Guo shows that a storage device not directly connected to the media server is obvious (Col. 3 lines 55-64: Helper includes a cache and prefetch storage for media information, the storage is not directly connected to the sender).

As such, it would have been obvious to modify Claims 1-4 of US 6,651,103 such that they further include the limitation "not directly connected to the media server". Such a configuration provides for improved quality of streaming transmission and overcomes previous problems related to streaming transmissions (In Guo: Col. 6 lines 14-31).

### ***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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14. Claims 1, 2, 8, 12, 13 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,377,972 by Guo et al. (Guo).

15. With respect to claim 1, Guo teaches a method of increasing the quality of streamed media information, comprising:

streaming media information from a media server to a user device (Col. 3 lines 41-54: sender streams media info to receiver);

storing a copy of the media information in a storage device not directly connected to the media server (Col. 3 lines 55-64: Helper includes a cache and prefetch storage for media information, the storage is not directly connected to the sender), the media information having missing information (Col. 6 lines 13-25: helper may have missing startup or catchup data);

sending a request to the media server for the missing information (Col. 6 lines 13-25: Helper obtains missing data from sender);

receiving the missing information (Col. 6 lines 13-25 Helper obtains missing data from sender); and

storing the missing information in the copy of the media information in the storage device (Col. 6 lines 13-25 Helper obtains missing data from sender).

16. With respect to claim 2, Guo further teaches identifying one or more versions of the media information stored in the storage device that have missing information; and performing the sending and receiving steps for each of the one or more versions of the media information (Col. 6 lines 13-25: Helper obtains missing data from sender for at least one version of media data).

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17. With respect to claim 8, Guo further teaches wherein the media information includes at least one of video and audio data (Col. 2 lines 61-67).

18. With respect to claim 12, Guo teaches an apparatus that increases the quality of streamed media information, comprising:

a controller (Col. 3 lines 55-64: helper would have a controller as claimed); and

a storage device not directly connected to a media server (Col. 3 lines 55-64:

Helper includes a cache and prefetch storage for media information, the storage is not directly connected to the sender), wherein media information is streamed from the media server to a user device (Col. 3 lines 41-54: sender streams media info to receiver) and a copy of the media information is stored in the storage device (Col. 3 lines 55-64: Helper includes a cache and prefetch storage for media information), the media information having missing information (Col. 6 lines 13-25: helper may have missing startup or catchup data), and wherein the controller sends a request to the media server for the missing information, receives the missing information and stores the missing information in the storage device (Col. 6 lines 13-25 Helper obtains missing data from sender).

19. With respect to claim 13, Guo further teaches wherein the controller identifies one or more versions of the media information stored in the storage device that have missing information and sends the request for each of the one or more versions of the media information (Col. 6 lines 13-25: Helper obtains missing data from sender for at least one version of media data).

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20. With respect to claim 19, Guo further teaches wherein the media information includes at least one of video and audio data (Col. 2 lines 61-67).

***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 3, 4, 9-11, 14, 15, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo in view of U.S. Patent 6,031,818 by Lo et al. (Lo).

23. With respect to claim 3, Guo does not explicitly disclose wherein identifying one or more versions of the media information includes at least one of determining if a list of missing data packets is associated with the one or more versions of the media information and determining if a missing data packet flag is set.

Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes determining if a list of missing data packets is associated with one of the media information (Col. 5 lines 28-37; tables 220 and 210) and determining if a missing data packet flag is set (Col. 4 lines 24-44; valid\_tag indicates missing data).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Guo and modify it as indicated by Lo such that it further comprises wherein identifying one or more versions of the media



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information includes at least one of determining if a list of missing data packets is associated with the one or more versions of the media information and determining if a missing data packet flag is set. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

24. With respect to claim 4, Guo does not explicitly disclose sending a request to the media server includes identifying the missing data packets in the media information and sending a request for only the identified missing data packets.

Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes identifying missing data packets and sending a request for only the identified missing data packets (Col. 4 lines 5-23 and Col. 7 lines 22-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Guo and modify it as indicated by Lo such that it further comprises sending a request to the media server includes identifying the missing data packets in the media information and sending a request for only the identified missing data packets. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

25. With respect to claim 9, Guo does not explicitly disclose wherein the missing information in the media information is identified while the media information is streamed from the media server to the user device.

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Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes identifying the missing information while the media information is streamed from the media server to the user device (Col. 3 lines 10-25 and Col. 4 lines 5-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Guo and modify it as indicated by Lo such that it further comprises wherein the missing information in the media information is identified while the media information is streamed from the media server to the user device. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

26. With respect to claim 10, Guo further teaches wherein the sending a request, receiving the missing information and storing the missing information steps are performed upon identification of the missing information (In Lo: Col. 3 lines 10-25 and Col. 4 lines 5-23).

27. With respect to claim 11, Guo further teaches wherein the sending a request, receiving the missing information and storing the missing information steps are performed periodically or when a network congestion level is below a predetermined threshold (In Lo: Col. 4 line 53- Col. 5 line 5).

28. With respect to claim 14, Guo does not explicitly disclose wherein the controller identifies one or more versions of the media information by at least one of determining if

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a list of missing data packets is associated with the one or more versions of the media information and determining if a missing data packet flag is set.

Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes determining if a list of missing data packets is associated with one of the media information (Col. 5 lines 28-37; tables 220 and 210) and determining if a missing data packet flag is set (Col. 4 lines 24-44: valid\_tag indicates missing data).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Guo and modify it as indicated by Lo such that it further comprises wherein the controller identifies one or more versions of the media information by at least one of determining if a list of missing data packets is associated with the one or more versions of the media information and determining if a missing data packet flag is set. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

29. With respect to claim 15, Guo does not explicitly disclose wherein the controller sends a request to the media server by identifying missing data packets in the media information and sending a request for only the identified missing data packets..

Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes identifying missing data packets and sending a request for only the identified missing data packets (Col. 4 lines 5-23 and Col. 7 lines 22-38).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Guo and modify it as indicated by Lo such that it further comprises wherein the controller sends a request to the media server by identifying missing data packets in the media information and sending a request for only the identified missing data packets. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

30. With respect to claim 20, Guo does not explicitly disclose wherein the controller identifies the missing information in the media information while the media information is streamed from the media server to the user device.

Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes identifying the missing information while the media information is streamed from the media server to the user device (Col. 3 lines 10-25 and Col. 4 lines 5-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Guo and modify it as indicated by Lo such that it further comprises wherein the controller identifies the missing information in the media information while the media information is streamed from the media server to the user device.. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50 and In Guo: Col. 6 lines 13-25).

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31. With respect to claim 21, Guo further teaches wherein the controller sends the request, receives the missing information and stores the missing information immediately upon identification of the missing information (In Lo: Col. 3 lines 10-25 and Col. 4 lines 5-23).

32. With respect to claim 22, Guo further teaches wherein the controller sends the request, receives the missing information and stores the missing information periodically or when a network congestion level is below a predetermined threshold (In Lo: Col. 4 line 53- Col. 5 line 5).

33. Claims 5, 6, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo in view of U.S. Patent 5,826,198 by Bergins et al. (Bergins).

34. With respect to claim 5, Guo does not explicitly disclose wherein sending a request to the media server includes requesting transmission of the entire media information.

Bergins teaches requesting transmission of an entire media information (Col. 8 lines 9-12) as it may be beneficial for smaller sized media information.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Guo and modify it as indicated by Bergins such that it further comprises wherein sending a request to the media server includes requesting transmission of the entire media information. One would be motivated to have this, as the benefits would apply to the smaller sized media information disclosed by Guo (Col. 2 lines 62-67).

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35. With respect to claim 6, Guo further teaches wherein storing the missing information includes rewriting the entire retransmitted media information over the copy of the media information in the storage device (In Bergins: Col. 8 lines 9-12, file would replace any previous file attempt).

36. With respect to claim 16, Guo does not explicitly disclose wherein the controller sends a request to the media server by requesting retransmission of the entire media information.

Bergins teaches requesting transmission of an entire media information (Col. 8 lines 9-12) as it may be beneficial for smaller sized media information.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Guo and modify it as indicated by Bergins such that it further comprises wherein the controller sends a request to the media server by requesting retransmission of the entire media information. One would be motivated to have this, as the benefits would apply to the smaller sized media information disclosed by Guo (Col. 2 lines 62-67).

37. With respect to claim 17, Guo further teaches wherein the controller stores the missing information in the storage device by rewriting the entire retransmitted media information over the copy of the media information in the storage device (In Bergins: Col. 8 lines 9-12, file would replace any previous file attempt).

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38. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo in view of Bergins as applied to claims 9 and 20 above, and further in view of U.S. Patent 6,463,509 by Teoman et al. (Teoman).

39. With respect to claim 7, Guo in view of Bergins does not explicitly disclose wherein storing the missing information includes: storing the entire retransmitted media information in the storage device; comparing a number of missing data packets in the entire retransmitted media information with a number of missing data packets in the copy of the media information; and retaining either the entire retransmitted media information or the copy of the media information in the storage device, whichever has fewer missing data packets.

Teoman teaches comparing two different entire versions of a data file and retaining the copy of the data file that is most complete (Col. 14 lines 48-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Guo in view of Bergins and modify it as indicated by Teoman such that it further comprises wherein storing the missing information includes: storing the entire retransmitted media information in the storage device; comparing a number of missing data packets in the entire retransmitted media information with a number of missing data packets in the copy of the media information; and retaining either the entire retransmitted media information or the copy of the media information in the storage device, whichever has fewer missing data packets. One would be motivated to have this as it is desirable to have a proper working version of the data file (In Teoman Col. 14 lines 48-64).

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40. With respect to claim 18, Guo in view of bergins does not explicitly disclose wherein the controller stores the missing information in the storage device by: storing the entire retransmitted media information in the storage device; comparing a number of missing data packets in the entire retransmitted media information with a number of missing data packets in the copy of the media information; and retaining either the entire retransmitted media information or the copy of the media information in the storage device, whichever has fewer missing data packets.

Teoman teaches comparing two different entire versions of a data file and retaining the copy of the data file that is most complete (Col. 14 lines 48-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Guo in view of Bergins and modify it as indicated by Teoman such that it further comprises wherein the controller stores the missing information in the storage device by: storing the entire retransmitted media information in the storage device; comparing a number of missing data packets in the entire retransmitted media information with a number of missing data packets in the copy of the media information; and retaining either the entire retransmitted media information or the copy of the media information in the storage device, whichever has fewer missing data packets. One would be motivated to have this as it is desirable to have a proper working version of the data file (In Teoman Col. 14 lines 48-64).



***Conclusion***

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
42. U.S. Patent 6,275,471 by Bushmitch et al. "Method for reliable real-time multimedia streaming" August 14, 2001. Discloses the use of NACKs to reconstruct missing information of a media stream.
43. U.S. Patent 6,484,212 by Markowitz et al. "Proxy apparatus and method for streaming media information" November 19, 2002. Patent of Application 09/294,525.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Lazaro  
February 16, 2007



SALEH NAWAR  
SUPERVISORY PATENT EXAMINER